

DEPARTMENT ATTORNEY GENERAL/MPCA

*Office Memorandum*

TO : Erica Dolgin  
Bob Leininger  
Frank Hermann  
Mike Kosakowski



DATE: 7/14/82

FROM : Steve Shakman S.S.  
Special Assistant Attorney General

PHONE: 931627

SUBJECT: U.S. v. Reilly Tar: Well W23 Investigation

Enclosed is a progress report from Hickok & Associates on Well W23 project and an earlier memo governing Mike Hansel's brief summary of the materials encountered by the well driller during the first month of the operation. No analytical results are yet available.

SS:cg  
Attachments

# Office Memorandum

DEPARTMENT ATTORNEY GENERAL - MPCA

TO : REILLY TAR FILE

DATE: 7/9/1982

FROM : STEVE SHAKMAN S.S.  
Special Assistant  
Attorney General

PHONE:

SUBJECT: Summary of Well W23 Investigation: June 7, 1982 - July 7, 1982

Mike Hansel provided the following summary of W23 activity.  
Mike and Hickok have many slides and photos.

June 7

Original bottom was 595 feet, but in putting in 4" casing, coal tar was forced up into the casing to 574 feet

From 574 feet to about 645 feet, material changed from almost pure tar to sand and tar mixture. Also found debris (like rope or metal)

At 648 feet encountered large metal object and lost sampler; got around the object and sampler, encountered relatively clean sand with only flecks of coal tar to a depth of about 680 feet. Also encountered pockets of gravel from the drift that apparently fell into the hole.

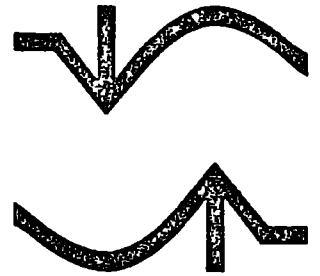
At about 680 feet encountered a second batch of coal tar that was much less viscous. By 693 coal tar was becoming more viscous and "spongy".

July 7

At 693 feet, progressing at 5 ft/day (100 ft/20 days drilling)

545 Indian Mound  
Wayzata, Minnesota 55391

(612) 473-4224



July 9, 1982

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MPCA  
ATTORNEY GENERAL

Mr. Michael J. Hansel  
Regulatory Compliance Section  
Solid and Hazardous Waste Division  
Minnesota Pollution Control Agency  
1935 West County Road B2  
Roseville, Minnesota 55113

Re: St. Louis Park Well Abandonment Program

Dear Mr. Hansel:

Enclosed herewith please find a copy of Progress Report No. 1 for the period June 7, 1982 to July 2, 1982, for work performed on the above referenced project.

This report summarizes the work performed, difficulties encountered, work anticipated for the month of July, expenditures, and a revised work schedule.

In general, the drilling at Well W-23 is progressing very slowly due to the difficulty in removing the material from the bore hole. The material is soft and sticky thereby making it very difficult to remove by means of a core barrel sampler, split spoon sampler or bailer. Material thus far extracted has a very strong creosote odor, is black to dark brown in color and obviously contains much creosote/coal tar. The material is very irritative to the skin and the strong odor/fumes has necessitated the use of respirators for those working around the well.

In view of the potential hazards associated with the removal of the material in the bore hole and those working at the site, a sample has been sent to the Iowa Hygienics Laboratory and an organic scan performed. The results of the scan should be available on Monday, July 12, 1982.

The search and inventory is progressing satisfactorily with the door-to-door search scheduled to start on July 12, 1982.

Mr. Michael J. Hansel

Page Two

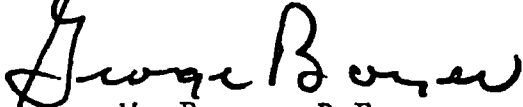
July 9, 1982

We trust the enclosed Progress Report is sufficient in detail to keep everyone abreast of the work. Details on the work or details on any particular item will be addressed as required.

Sincerely,

Very truly yours,

EUGENE A. HICKOK AND ASSOCIATES



George W. Boyer, P.E.  
Vice President

bt

cc: Jim Pankanin, US/EPA Chicago  
Richard Bartelt, US/EPA Chicago  
Lowell Richie, MPCA  
Richard Ferguson, MPCA  
Stephen Shakman, Attorney General, MPCA  
Gary Englund, MN Dept. of Health  
Richard Koppy, City of St. Louis Park

## PROGRESS REPORT NO. 1 -- June 7, 1982 to July 2, 1982

### Investigation of Former Republic Creosote Supply Well (USGS W23)

#### I. Introduction

This initial progress report is intended to highlight the activities on the former Republic Creosote Supply Well (USGS W23) for the period June 7, 1982 to July 2, 1982.

Daily work activity reports are prepared as the work progresses and are available for review at the job site as well as at the office of E. A. Hickok and Associates.

A detailed work plan and schedule has been submitted to MPCA. The MPCA has reviewed the work plan and provided comments on June 17, 1982. A response to these comments, which concerns sampling protocol and chain of custody procedures, will be submitted shortly.

#### II. Highlight of Work Activities (June 7, 1982-July 2, 1982)

##### A. Well W23

Work activities started on June 7, 1982 when E. H. Renner and Sons, Inc. mobilized at the W23 site. Equipment consists of a cable tool rig along with miscellaneous tools. A trailer was moved on the site to serve as an office and space for sample bottles, safety equipment, etc.

The existing 4-inch casing and packer were removed on June 7, 1982 and revealed that only 250 feet of 4-inch casing was originally installed, not 400 feet as expected. The packer, installed between 245 and 250 feet, was found in good condition.

New Schedule 40 4-inch casing was installed from grade to a depth of 594 feet, with packers at 250 feet and 590 feet. Work was suspended for the weekend.

On Friday, June 11, 1982, a core barrel sampler was lowered into the 4-inch casing. Creosote was encountered at a depth of 567.8 feet. Samples were retrieved from the 567.8-foot depth to a depth of 601 feet. The material in the well was very difficult to remove and necessitated using several different types of core barrels, samplers, and split spoon samplers. The material removed was black, soft with small amounts of sand, and irritative to the skin.

Heat was applied to the core barrel sampler to remove the material retrieved. While applying heat, the material on the outside of the barrel would sustain a flame of its own and produced a greenish smoke.

Drilling/sampling continued the week of June 14, 1982 to June 18, 1982, with samples taken continuously from 593 to 601 feet. MPCA suggested taking samples at 20-foot intervals. Sampling continued to a depth of 629 feet on Friday afternoon, June 18, 1982. Material removed is still black, soft to hard in consistency, and has a creosote odor.

Drilling/sampling continued the week of June 21, 1982, with a depth of 644 feet attained by June 25, 1982. Material in well became very soft and "goosey" at 630 feet to 644 feet. A split spoon sampler was lost at 644 feet and was unable to be removed. An obstruction is present around 645 feet and appears from the driller to be a pump or large metal object.

On Monday, June 28, 1982, a drill bit was lowered into the well in an attempt to break up the metal obstruction or move the object out of the way. Two days were spent using a drill bit to move the obstruction clear. Some small metal pieces were removed.

Drilling/sampling continued on Wednesday, June 30, 1982. Material removed looks like asphalt from 650 to 680 feet, and is becoming softer. On July 1, 1982, at a depth of 680 feet, the material removed is dark brown, soft, and contains 1-inch size aggregate. This material is very irritative to the skin and eyes, and produces a very pungent smell.

Full-length protective clothing and respirators are now required when working adjacent to the well site. A sample was collected and has been sent to the Iowa Hygienics Laboratory for an organic scan. The well depth stood at 688 feet at the end of Friday, July 2, 1982.

#### B. Search and Inventory

The search and inventory portion of the contract is progressing, with collection of all existing well data from the USGS, MGS, Health Department, Cities of St. Louis Park, Edina and Hopkins, E. H. Renner and Sons, Bergerson-Caswell, Tri-State Drilling and Equipment, and McCarthy Well Drilling Company.

Much of the well data collected is not on file with the MGS computerized data base system and consequently is new data information. All wells which previously have not been identified with unique well numbers have been assigned a unique well number. A block of unique well numbers have been assigned by the MGS.

All wells in the door-to-door search area have been located on a base map and filed. The door-to-door search will begin on July 12, 1982 in an attempt to locate all wells in the search area and to secure pertinent information on each well.

A well inventory questionnaire has been prepared and will be used for each well identified in the search area. This information will be computerized; however, the exact manner, format, etc., has not been established.

### III. Anticipated Work for the Period July 5, 1982 to July 30, 1982

#### A. Well 23

Work will continue on Well 23 in a manner similar to the month of June 1982. Based on the work thus far completed, we anticipate that a depth of 920 feet will be reached on July 30, 1982.

#### B. Search and Inventory

The door-to-door search will begin on July 12, 1982 and will continue for the month of July 1982. It is anticipated that all well data will be available around July 30, 1982, and ready to be tabulated-computerized. Computer format will be developed and submitted on July 15, 1982 for MPCA review and comment.

#### IV. Expenditures

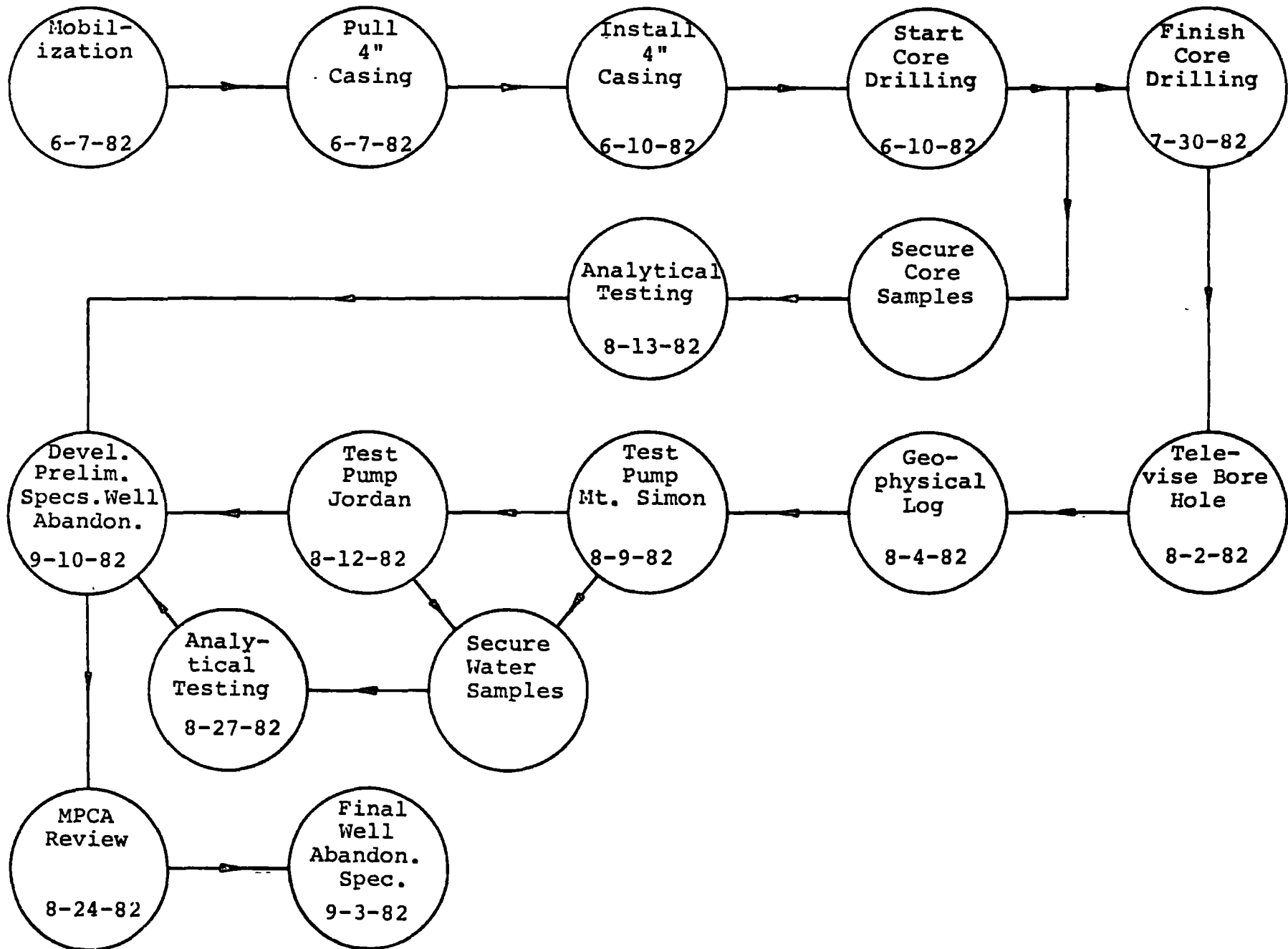
See attached statement.

#### V. Project Schedule

See attached work schedule.

# MILESTONE CHART

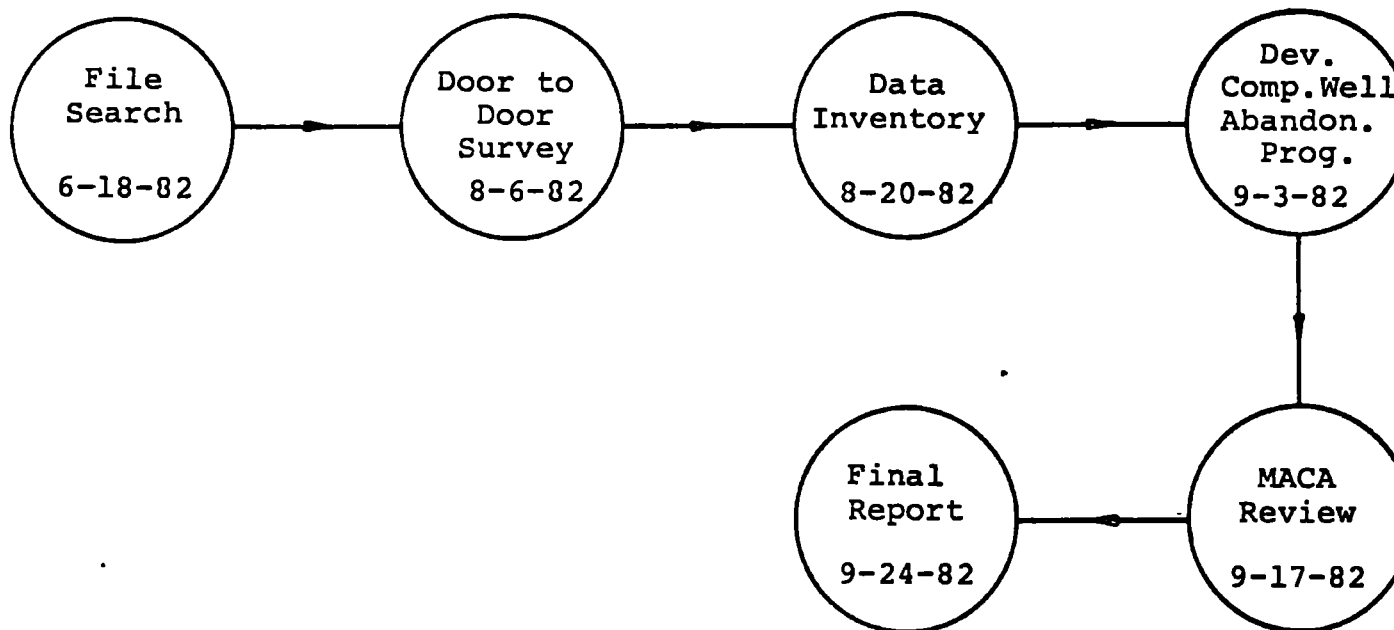
## Republic Creosote Supply Well (USGS W23)





## MILESTONE CHART

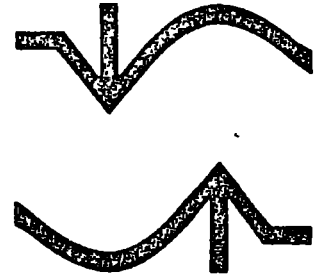
Search, Inventory and Abandonment Specifications  
of Wells in the St. Louis Park Area



Eugene A Hickok and Associates, Inc  
Hydrologists — Engineers

545 Indian Mound  
Wayzata, Minnesota 55391

(612) 473-4224



July 9, 1982

Mr. Michael J. Hansel  
Regulatory Compliance Section  
Minnesota Pollution Control Agency  
1935 West County Road B2  
Roseville, Minnesota 55112

STATEMENT

Re: Professional Services - May and June, 1982  
Account I.D. No. 828392  
Requisition No. 08969  
Organization 32300  
Vendor No. 0350480002

Non-Responsive

Expenses

Reproductions	\$ 13.95
Mileage	82.72
Long Distance Telephone	.80
Photo Supplies	18.97
Warners Hardware	31.99
E. H. Renner & Sons	12,783.53
Continental Safety	29.70
Consolidated Container	236.25
American Scientific Products	<u>212.52</u>

\$13,410.43

\$25,356.23

July 9, 1982 Statement -- Page Two  
Account I.D. No. 828392  
Requisition No. 08969  
Organization 32300  
Vendor No. 0350480002

Non-Responsive

Expenses

Reproductions	34.95	
Parking	.90	
Mileage	14.96	
Albinsons	<u>40.01</u>	
		<u>\$ 5,952.82</u>

TOTAL AMOUNT DUE ----- \$31,309.05

# E. H. Renner & Sons

WELL DRILLING FOR FOUR GENERATIONS

6300 Industry Ave. N. W., Anoka, Minn. 55303, (612) 427-8100

Eugene Hickok & Assoc.  
545 Indian Mound  
Wayzata, MN. 55391

RECEIVED JUN 3 0 1982

St. Louis Park, MN.

Task IB

Well No. 23

Estimat No. one to 6/28/82

Item		L.S		
1	Mobilization & Demobilization.			\$ 500.00
2	Remove 250 lf of 4" casing & packer, Load and haul away, unloading and cleaning of trailer.		Non-Responsive	0 800.00
3	Install 596 lf of 4" casing with hookwall packer.			3,576.00
4	Cleaning and repair of packer .			0 112.00
5	Left hand thread installed on pipe , welded.			68.00
	Left hand and slip weld coupling welded			147.00
	Rubber boots.			0 42.00
	Stainless Steel straps			5 7.35
	Pellets.			0 24.00
6	Hauling barrels from Mpls to job site.			0 140.00
7	Drilling, coring, sampling & bailing 581' to 650'			0 6,900.00
8	Down time June 9th and 10th			0 640.00
	Cleaning time to remove tar - propane from sampler tube.			
	estimate			0 500.00
	Completed to date			\$ 13,456.00
	Less 5% retainage			672.00
	Less previous payments			0
	Amount due estimate No. one			\$ 12,784.00